

1461

**WRITTEN REPORT ON THE POSSIBLE
RELEASE FROM THE FMPC PLANT 1 PAD**

04-05-1991

**DOE-FSO/SERC
DOE-1083-91
1
LETTER**



Department of Energy

FMPC Site Office
P.O. Box 398705
Cincinnati, Ohio 45239-8705
(513) 738-6319

1461

APR 0 5 1991

DOE-1083-91

State Emergency Response Commission
c/o Mr. Tim Hickin
1800 WaterMark Drive
P.O. Box 1049
Columbus, Ohio 43266-1049

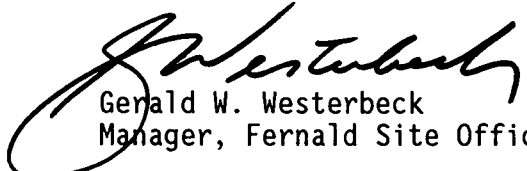
Dear Mr. Hickin:

WRITTEN REPORT ON THE POSSIBLE RELEASE FROM THE FMPC PLANT 1 PAD

A notification was made to Ohio EPA on March 7, 1991, of a possible release of regulated materials from the Feed Materials Production Center (FMPC). Pursuant to Ohio Revised code (ORC) 3750.06(D) and the Code Of Federal Regulations (40 CFR 355.40(b)), a written report is also required. The enclosed report has been prepared to meet these requirements.

If there are any questions on this report, please call David Rast at (513) 738-6322.

Sincerely,


Gerald W. Westerbeck
Manager, Fernald Site Office

FSO:Rast

Enclosure: As stated

cc w/o encl.:

E. D. Savage/WMCO
AR Files

ERA Project Files



Department of Energy

FMPC Site Office
P.O. Box 398705
Cincinnati, Ohio 45239-8705
(513) 738-6319

APR 0 5 1991

DOE-1083-91

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Mr. Graham E. Mitchell
FMPC Coordinator
Ohio Environmental Protection Agency
40 S. Main Street
Dayton, Ohio 54402

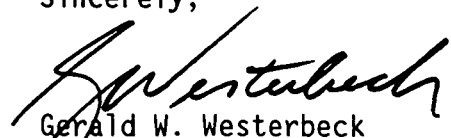
Dear Mr. Mitchell:

WRITTEN REPORT ON THE POSSIBLE RELEASE FROM THE FMPC PLANT 1 PAD

Ohio EPA was informed of the possible release of regulated materials from the Feed Materials Production Center (FMPC) Plant 1 Pad on March 7, 1991. Pursuant to Ohio Revised Code (ORC) 3750.06(D) and the Code Of Federal Regulations (40 CFR 355.40(b)), a written report is also required. The enclosed report has been prepared to meet these requirements and provide updated information on the event.

If there are any questions on this report, please call David Rast at (513) 738-6322.

Sincerely,


Gerald W. Westerbeck
Manager, Fernald Site Office

FSO:Rast

Enclosure: As stated

cc w/o encl.:

G. Ioannides, OEPA
E. D. Savage, WMCO
AR Files

ERA Project Files



Department of Energy

FMPC Site Office

P.O. Box 398705

Cincinnati, Ohio 45239-8705

(513) 738-6319

APR 05 1991

DOE-1083-91

1461-

Mr. Gary Miller, Co-Chairman
Local Emergency Planning Committee For Hamilton County
c/o American Red Cross
720 Sycamore
Cincinnati, Ohio 45202

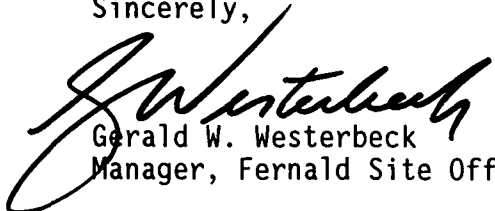
Dear Mr. Miller:

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Manager, Fernald Site Office

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ERA Project File



Department of Energy

FMPC Site Office
P.O. Box 398705
Cincinnati, Ohio 45239-8705
(513) 738-6319

1461

APR 05 1991

DOE-1083-91

Mrs. Irene Lewis
Director of Civil Defense for Butler County
141 Court St.
Hamilton, Ohio 45011

Dear Mrs. Lewis:

WRITTEN REPORT ON THE POSSIBLE RELEASE FROM THE FMPC PLANT 1 PAD

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If there are any questions on this report, please call David Rast at (513) 738-6322.

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Gerald W. Westerbeck
Manager, Fernald Site Office

FSO:Rast

Enclosure: As stated

cc w/o encl.:

E. D. Savage, WMCO
AR Files

ERA Project Files



Department of Energy

FMPC Site Office

P.O. Box 398705

Cincinnati, Ohio 45239-8705

(513) 738-6319

1461

APR 0 5 1991

DOE-1083-91

Mr. Liore Maccarone, Co-Chairman
Local Emergency Planning Committee
For Hamilton County
84 Shadybrook Drive
Cincinnati, Ohio 45216

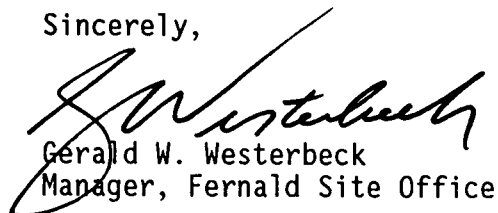
Dear Mr. Maccarone:

WRITTEN REPORT ON THE POSSIBLE RELEASE FROM THE FMPC PLANT 1 PAD

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If there are any questions on this report, please call David Rast at (513) 738-6322.

Sincerely,


Gerald W. Westerbeck
Manager, Fernald Site Office

FSO:Rast

Enclosure: As stated

cc w/o encl.:

E. D. Savage, WMCO

AR Files

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**Department of Energy**

FMPC Site Office
P.O. Box 398705
Cincinnati, Ohio 45239-8705
(513) 738-6319

APR 0 5 1991**DOE-1083-91**

Mr. Gerry Ioannides, Director
Ohio Environmental Protection Agency
1800 WaterMark Drive
P.O. Box 1049
Columbus, Ohio 43266-10409

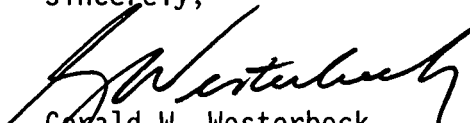
Dear Mr. Ioannides:

WRITTEN REPORT ON THE POSSIBLE RELEASE FROM THE FMPC PLANT 1 PAD

Ohio EPA was informed of the possible release of regulated materials from the Feed Materials Production Center (FMPC) Plant 1 Pad on March 7, 1991. Pursuant to Ohio Revised Code (ORC) 3750.06(D) and the Code Of Federal Regulations (40 CFR 355.40(b)), a written report is also required. The enclosed report has been prepared to meet these requirements and provide updated information on the event.

If there are any questions on this report, please call David Rast at 513) 738-6322.

Sincerely,


Gerald W. Westerbeck
Manager, Fernald Site Office

FSO:Rast

Enclosure: As stated

cc w/encl.:

Mr. Graham Mitchell, OEPA
E. D. Savage, WMCO
AR Files

ERA Files

40 CFR 355.40(b) AND ORC 3750.06(D) RELEASE REPORT
FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO

A. BACKGROUND INFORMATION:

Efforts have been ongoing at the Feed Materials Production Center (FMPC) to characterize all waste materials for interim storage and/or disposal. As part of this program, sampling has been conducted on a number of materials in drums stored on the Plant 1 Pad at the FMPC. Analytical results for a waste stream of Grit Blast concluded that this material has been determined to be a hazardous waste.

While overpacking and weighing of the containers, weight discrepancies (both gains and losses) were noted from the weights recorded on the original containers. A total of four containers of this material were reweighed and overpacked for storage producing a total of four new overpack drums. As a result of the reweighing, an unaccounted total weight loss of two pounds was reported from one of the containers.

Information indicates that the container has been in storage for ten months, and it can not be conclusively determined if a Reportable Quantity (RQ) release of a hazardous substance had occurred within any one twenty-four hour period. As a conservative approach, required notifications were made on March 7, 1991, by the U.S. Department of Energy (DOE) pursuant to CERCLA, SARA, and Ohio Revised Code reporting requirements for the release of hazardous substances. The FMPC RCRA Contingency Plan for hazardous waste releases was not implemented since the potential release was historical in nature, no imminent threat to human health or the environment was indicated.

B. REQUIRED INFORMATION:

Pursuant to 40 CFR 355.40(b) and ORC 3750.06(D), a written report on the release is required to be submitted within 30 days of the event. The following information is provided to meet these requirements.

Updated Information

1. Location of the potential release: The potential release was from a container stored on the Plant 1 Pad located in the northwest area of the FMPC site (Attachment 1a). The container was stored adjacent to the west truck dock of the approximately 375,000 square foot storage pad as shown in Attachment 1b.
2. Chemical name and identity of any substance involved in the release and whether the substance is an extremely hazardous substance: No extremely hazardous substances have been identified in this material. The drum contains a RCRA regulated material waste stream which has been confirmed as containing the hazardous waste constituent of lead, which has a Reportable Quantity of one pound. The uranium content in this waste stream averages 0.50% U-235.

3. Estimate of the quantity of any hazardous substance released into the environment: A total of one container showed an unaccounted weight loss of two pounds. However, no spilled material was noted at the location where the drum had been previously stored.

Some uranium loss could also have occurred. The maximum uranium loss that could have occurred is estimated at 0.2 pounds based on a uniform loss of drum contents. Attachment 1c details the uranium calculations for the waste stream.

4. Time and duration of the release: The drums have been stored on the Plant 1 Pad since May 1990 and reweighing is usually conducted when the drums are overpacked. Therefore, the exact time and duration of any potential release cannot be determined, nor can it be determined if any RQ release had occurred in any twenty-four hour period in the past.

5. Environmental media into which the substance was released: The Plant 1 Pad drains to the FMPC storm sewer system. The storm sewer drains discharge to the Storm Water Retention Basin (SWRB) which is pumped, after a delay for settling, to Manhole 175 and then to the Great Miami River. The possibility therefore exists that some released materials may have gone through the FMPC storm sewer system to the Great Miami River. The storm sewer flows going to the Great Miami River are monitored for uranium on a daily basis, however, routine monitoring is not performed for RCRA hazardous waste constituents in the Great Miami River discharges.

In addition to possible storm sewer discharges, any released materials could have run off the Plant 1 Pad into an adjacent field to the west of the pad. Sampling of this area has indicated some uranium contamination in the soil, however, the source of the contamination has not been determined at this time. Analysis of soil samples for total metals have indicated isolated low level concentrations of lead and barium (non-leaching), again, the source of the contamination has not been determined.

6. Known or anticipated acute or chronic health risks associated with the release: There are no known or anticipated health risks as a result of the potential release. The most probable individuals with the potential to be affected, if any, would have been Plant 1 Pad workers, who are regularly monitored through a bioassay program for internal contamination. No unusual intakes associated with the materials discussed in this report have been noted.
7. Proper precautions to take as a result of the release: No special precautions or emergency response actions were taken as a result of the discovery of this potential release. All FMPC workers involved in the actual drum movement and overpacking operation were properly trained prior to the start of this operation.
8. Name and telephone number of the person or persons to be contacted for further information: Mr. Bobby J. Davis, DOE-FMPC, (513) 738-6156

Information under 40 CFR 355.40(b) and ORC 3750.06(D)(1)-(5)

1. Actions taken to respond to and contain the release: The container of this material was overpacked. Because no real time release of material was noted to occur, and no visible contamination was observed, no additional actions were taken to respond and contain the potential release. The Plant 1 Pad is identified as a RCRA storage unit.
2. Known or anticipated acute or chronic health risks associated with the release: There are no known or anticipated health risks as a result of the potential release.
3. Advice regarding medical attention necessary for individuals exposed to the substance release: No medical advice is warranted as a result of the potential release.
4. Summary of all actions taken by the owner or operator to prevent a recurrence of the release: The container involved was overpacked into a 55-gallon overpack drum, and it being inspected daily until it is transported to an approved hazardous waste storage facility.

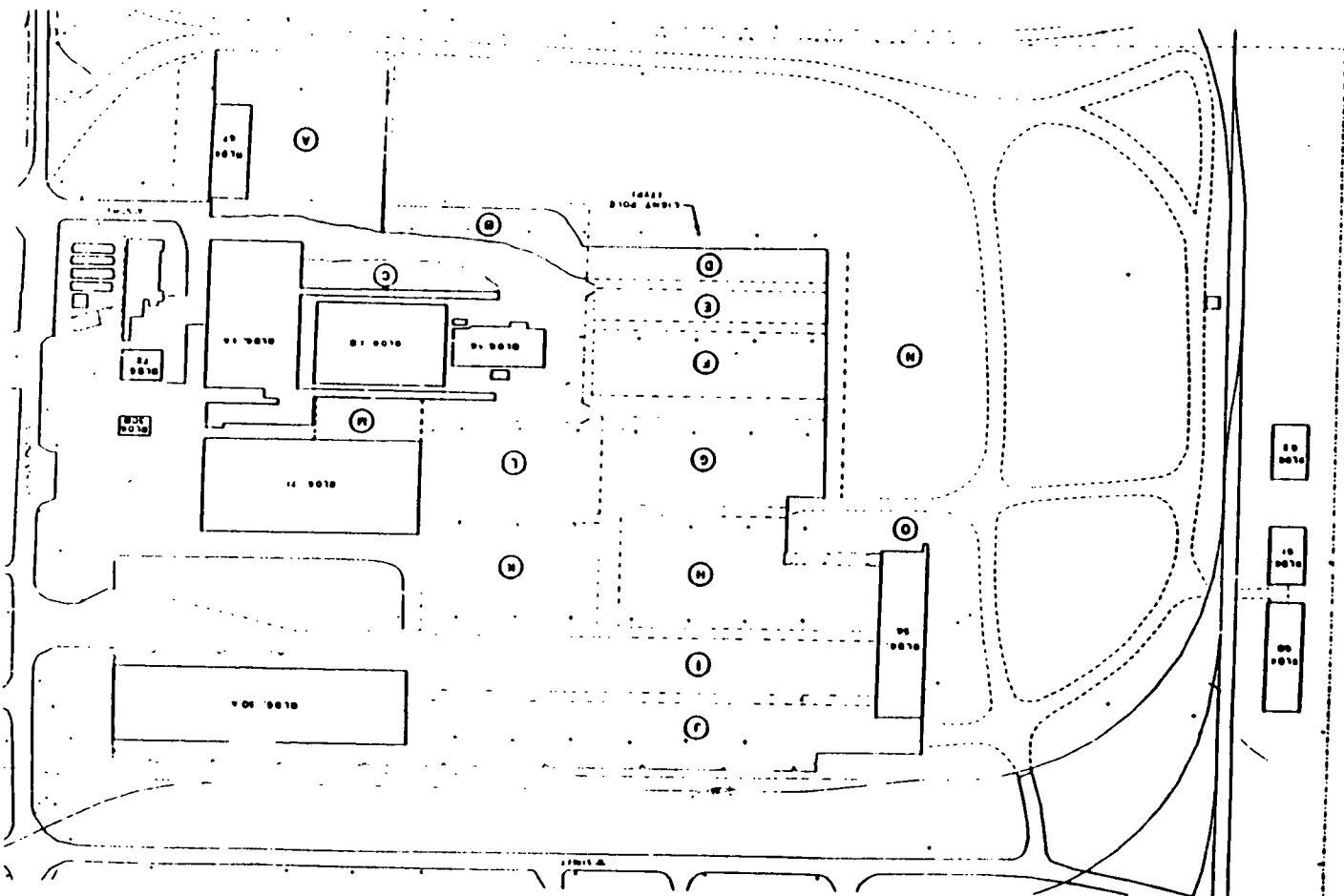
Additional actions are underway at the FMPC to prevent releases from the remaining drums stored on the Plant 1 Pad. First, daily inspections of all the drums on the Plant 1 Pad are performed to identify badly deteriorated drums that present an immediate risk of leakage. Second, a project is ongoing to overpack more than 30,000 of the approximately 45,000 additional drums from the Plant 1 Pad. Third, efforts are ongoing to move a portion of the drums out of the weather from outdoor storage into existing FMPC process buildings. To date, some 21,500 drums have been moved to covered indoor storage. Fourth, contamination barriers constructed of impermeable herculite and PVC piping have been erected to contain potential releases from drums to the Plant 1 Pad. Fifth, efforts are ongoing to analyze and characterize all waste drums on the Plant 1 Pad. Lastly, planning is in progress to process the non-hazardous low level radioactive wastes to allow off-site disposal.

FOIA b 7 - D

RETURNED TO MAIL CO OF OHIO
 (W) FERNALD OHIO (3)
 1125 NORTON & PRODUCTION CENTER
 U.S. DEPARTMENT OF ENERGY
 PRODUCTION AREA SUITE P. 414

[illegible]

Attachment 1b



SCALE-1"=50'

WESTINGHOUSE MATERIALS DIVISION CLEVELAND, OHIO		FIELD MATERIALS PRODUCTION CENTER DEPARTMENT OF ENERGY		THE STATE OF OHIO DEPARTMENT OF REVENUE		PROJECT NO. 1461 SHEET NO. 1		DATE: 10/1/80		DRAWN BY: J. L. H.		CHECKED BY: J. L. H.		APPROVED BY: J. L. H.	
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DO NOT SCALE
REDUCED DRAWING

Enclosure 1c

WEIGHT DISCREPANCY SUMMARY
Plant 1 Pad Storage Drum

SOURCE/MAT CODE	MATERIAL DESCRIPTION	# DRUMS	NET LBS	CONSTITUENT(RQ)
700 028	Grit Blast Material	$\frac{1}{1}$	$\frac{2}{2}$	Lead-D008 (1)
Total				

URANIUM CALCULATIONS FOR GRIT BLAST MATERIAL

LOT NUMBER	% URANIUM	%U235	POTENTIAL LBS LOST	LBS URANIUM
<u>W050-700-P028-0341</u>	<u>00.10</u>	<u>0.50</u>	<u>2.0</u>	<u>00.20</u>
TOTAL	-----	0.50	2.0	00.20